



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------------------|-----------------------------|
| 10/797,953 | 03/11/2004 | Kari Niemela | P2981US00 | 4858 |
| 30671 | 7590 | 09/28/2010 | | |
| DITTHAVONG MORI & STEINER, P.C. 918 Prince Street Alexandria, VA 22314 | | | EXAMINER HEIBER, SHANTELL LAKETA | |
| | | | ART UNIT 2617 | PAPER NUMBER |
| | | | NOTIFICATION DATE 09/28/2010 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@dcpatent.com

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/797,953 | Applicant(s) NIEMELA, KARI | |
| | Examiner SHANTELL HEIBER | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30,35-43 and 45-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30,35-43 and 45-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/11/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments (pages 14-20) with respect to claims 1-30 and 35-44 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments regarding claim 29 rejected under 35 U.S.C. 101 (pages 13-14) have been fully considered but they are not persuasive. Variations of the term "storage" are not necessarily considered to limit a media claim to non-transitory embodiments because many disclosures conflate storage media and signals, therefore, the claim is ineligible and the examiner maintains the 35 U.S.C. 101 rejection.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 29 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 29 claims a computer-readable storage medium where the specification specifically mentions examples of computer-readable medium that include carrier wave signals and wireless media (e.g., a computer readable signal, a computer readable telecommunication signal) (see paragraph 0057) which do not fall under statutory subject matter.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 15, 16, 29 and 45-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Peng, U.S. Publication No. 2004/0152487.

Regarding Claim 1, Peng discloses a mobile terminal (**i.e., wireless game control device 30; see Figure 3**) comprising:

a radio transceiver (**i.e., wireless audio video transmitter receiver circuit 32 and wireless game control transmitter receiver circuit 35; see Figure 3**) configured to transfer speech (**i.e., to talk to a game partner; see paragraph [0015]**) and game data (**i.e., game signals; see paragraph [0016]**) through a radio connection (**see Figure 3**) to a telecommunication system (**i.e., the system allowing for the game machine main unit 50 to receive; see paragraph [0019]**);

a loudspeaker (**i.e., speaker 343**) configured to reproduce audio (**see paragraph [0015]**);

a microphone (**i.e., microphone 342**) configured to capture speech of a user of the mobile terminal (**see paragraph [0015]**); and

a processing unit (**i.e., control circuit 31**) coupled to the radio transceiver (**see Figure 3**), the loudspeaker and the microphone configured to process the game data, to transfer the game data to and from another mobile terminal through the radio connection (**i.e., the control circuit 31 controls the wireless game control transmitter receiver circuit 35 to communicate with the wireless terminal device 40 of the game machine main unit 50 for transmitting game control signals and receiving game signals; see paragraph [0016]**), to receive captured speech of another user of the another mobile terminal through the radio connection, to capture speech of the user with the microphone, and to transfer the captured speech of the user to the another mobile terminal through the radio connection (**i.e., the control circuit 31 also controls the wireless audio video receiver circuit 32 to receive audio signals from the wireless terminal device 40 of the game machine main unit 50. The communication interface 33 enables the audio video unit 34 to communicate with the game machine main unit 50 for transmitting and receiving audio signals; see paragraphs [0015] and [0016]**), wherein the game data is independent from the captured speech of the user (**as shown in Figure 3 and explained in paragraphs [0013] and [0016], the game signals are transmitted and received via the circuit 35 and the audio signals are transmitted and received via the circuit 32 and the communication interface 33**).

Regarding Claims 2 and 16, Peng discloses wherein the method further comprises: determining to transfer the game data as in-band signaling in a speech channel of the radio connection, while the speech channel is transferring the captured

Art Unit: 2617

speech of the user, the captured speech of the another user, or a combination thereof.

See paragraph [0016].

Regarding Claims 15, 29 and 49, Peng discloses a method comprising:

determining to capture speech of a user of a mobile terminal **(i.e., via the microphone 342 and communication interface 33; see Figure 3)** **Also, see rejection for claim 1 above.;**

determining to transfer the captured speech of the user from the mobile terminal to another mobile terminal through a radio connection **(i.e., the communication interface 33 enables the audio video unit 34 to communicate with the game machine main unit 50 for transmitting audio signals; see paragraphs [0015] and [0016]);**

determining to transfer the game data between the mobile terminal and the another mobile terminal through the radio connection **(i.e., the control circuit 31 controls the wireless game control transmitter receiver circuit 35 to communicate with the wireless terminal device 40 of the game machine main unit 50 for transmitting game control signals; see paragraph [0016]),** the game data being independent from the captured speech of the user **(i.e., as shown in Figure 3 and explained in paragraphs [0013] and [0016], the game signals are transmitted and received via the circuit 35 and the audio signals are transmitted and received via the circuit 32 and the communication interface 33);** and

receiving at the mobile terminal captured speech of another user of the another mobile terminal through the radio connection **(i.e., the control circuit 31 also controls**

Art Unit: 2617

the wireless audio video receiver circuit 32 to receive audio signals from the wireless terminal device 40 of the game machine main unit 50. The communication interface 33 enables the audio video unit 34 to communicate with the game machine main unit 50 for receiving audio signals; see paragraphs [0015] and [0016]).

Regarding Claim 45, Peng discloses wherein the captured speech of the user is transferred to the another mobile terminal through the radio connection without going through a game server **(see Figure 3)**, and the captured speech of the another user is received through the radio connection without going through a game server **(see Figure 3)**.

Regarding Claim 46, Peng discloses further comprising: processing the game data and the captured speech of the another user at the mobile terminal; and determining to reproduce at the mobile terminal audio part of the game data and the captured speech of the another user **(see paragraphs [0015] and [0016])**.

Regarding Claim 47, Peng discloses wherein the audio part of the game data includes one or more game commands **(see paragraphs [0015] and [0016])**.

Regarding Claim 48, Peng discloses wherein the captured speech includes one or more comments of at least one of the user and the another user **(see paragraphs [0015] and [0016])**.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3-6, 10-14, 17-20 and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peng in view of Heden, U.S. Publication No. 2006/0165027.

Regarding Claims 3 and 17, Peng discloses the apparatus and method wherein the apparatus is further caused to determine to transfer the captured speech and the game data in a data channel of the radio connection as described above. Peng does not disclose a packet-switched data channel.

In a similar field of endeavor, Heden discloses considering mobile station capability in negotiating quality of service for packet switched services. Heden further discloses a packet-switched data channel. **(see paragraph [0019])**

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng with the teachings of Heden to arrive at the claimed invention for allowing devices to communicate effectively in a network using packet data.

Regarding Claims 4 and 18, Peng discloses the apparatus and method wherein the apparatus is further caused to determine to transfer the captured speech and the game data in a data channel of the radio connection as described above. Peng does not disclose a circuit-switched data channel.

Heden further discloses a circuit-switched data channel. **(see paragraph [0019])**

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng with the teachings of Heden to arrive at the claimed invention for allowing devices to communicate in real time effectively in a network using voice data.

Regarding Claims 5, 10, 12, 19, 24 and 26, Peng discloses the apparatus and method wherein the processing unit and the transceiver are further configured to transfer the game data utilizing a signaling resource and gaming specific resource of the radio connection as described above. Peng does not disclose wherein the radio connection comprises a dual transfer mode (DTM) radio connection.

Heden further discloses wherein the radio connection comprises a dual transfer mode (DTM) radio connection **(i.e., the mobile station has the capability to support DTM; see paragraph [0030])**.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng with the teachings of Heden to arrive at the claimed invention for allowing simultaneous transfer of circuit switched voice and packet switched data over the same radio channel.

Regarding Claims 6 and 20, Peng discloses the apparatus and method wherein the processing unit and the transceiver are further configured to transfer the game data as described above. Peng does not disclose utilizing a general packet radio service transparent transport protocol (GTTP).

Heden further discloses utilizing a general packet radio service transparent transport protocol (GTTP). **(see paragraphs [0023] and [0026])**

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng with the teachings of Heden to arrive at the claimed invention for allowing the user to continue connection when mobile such that the user is able to concentrate on the task rather than on the technology.

Regarding Claims 11, 13, 25 and 27, Peng discloses the apparatus and method wherein the gaming specific resources comprises gaming specific attributes **(i.e., game software)** as described above. Peng does not disclose wherein the signaling resource comprises a packet flow context (PFC) defined for the signaling and wherein the gaming specific resource comprises a packet flow context (PFC) defined by one or more gaming specific quality of service attributes.

Heden further discloses wherein the signaling resource comprises a packet flow context (PFC) defined for the signaling and wherein the gaming specific resource comprises a packet flow context (PFC) defined by one or more gaming specific quality of service attributes. **(see paragraph [0031])**

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng with the teachings of Heden to arrive at the claimed invention for allowing the sharing of BSS QOS information to be shared among several mobiles for determining load conditions and cell capabilities.

Regarding Claims 14 and 28, Peng discloses the apparatus and method wherein the gaming specific resources comprises gaming specific attributes **(i.e., game**

Art Unit: 2617

software) as described above. Peng does not disclose wherein the gaming specific resource comprises a temporary block flow (TBF) defined by one or more gaming specific quality of service attributes.

Heden further discloses wherein the gaming specific resource comprises a temporary block flow (TBF) defined by one or more gaming specific quality of service attributes. **(see paragraph [0030])**

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng with the teachings of Heden to arrive at the claimed invention for allowing the mobile station to assist in cell change for maintaining quality of service.

8. Claims 7-9 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peng and Heden in view of Marejka et al. (Marejka), U.S. Publication No. 2003/0135639.

Regarding Claims 7 and 21, Peng and Heden disclose the apparatus and method wherein the processing unit is further configured to transfer the game data utilizing the GTTP as described above. Peng and Heden do not disclose further configured to check one or more delay requirements of the game data, and to transfer the game data, if the one or more delay requirements meet a predetermined minimum delay limit.

In a similar field of endeavor, Marejka discloses a system monitoring service using throttle mechanisms to manage data loads and timing. Marejka further discloses further configured to check one or more delay requirements (**i.e., delay period**) of the

Art Unit: 2617

data (**i.e., message**), and to transfer the data, if the one or more delay requirements meet a predetermined minimum delay limit (**i.e., not exceeding the value of the decremental counter**)(see paragraphs [0042], [0043] and [0057]).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng and Heden with the teachings of Marejka to arrive at the claimed invention for preventing loss or slowing of data transmissions.

Regarding Claims 8 and 22, Peng and Heden disclose the apparatus and method wherein the processing unit is further configured to transfer the game data utilizing the GTTP as described above. Peng and Heden do not disclose further configured to check a volume of the game data, and to transfer the game data, if the volume meets a predetermined minimum volume limit.

Marejka discloses further discloses further configured to check a volume (**i.e., volume per transmission period**) of the data (**i.e., data message**), and to transfer the data, if the volume meets a predetermined minimum volume limit (**i.e., allowed volume of data for a particular transmission period**)(see paragraphs [0013], [0032] and [0041]).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng and Heden with the teachings of Marejka to arrive at the claimed invention for preventing congestion in data communication networks.

Regarding Claims 9 and 23, Peng and Heden disclose the apparatus and method wherein the processing unit is further configured to transfer the game data utilizing the GTTP as described above. Peng and Heden do not disclose further configured to check a block size of the game data, and to transfer the game data, if the block size meets a predetermined minimum block size limit.

Marejka discloses further configured to check a block size **(i.e., size)** of the data **(i.e., data message)**, and to transfer the data, if the block size meets a predetermined minimum block size limit **(i.e., if the size of the data message does not exceed the threshold for the current transmission period)(see paragraph [0014])**.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng and Heden with the teachings of Marejka to arrive at the claimed invention for preventing congestion in data communication networks.

9. Claims 30, 35 and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peng in view of Heden.

Regarding Claim 30, Peng discloses a network element of a telecommunication system comprising:

a radio transceiver **(i.e., i.e., wireless audio video transmitter receiver circuit 32 and wireless game control transmitter receiver circuit 35; see Figure 3)** configured to transfer captured speech and game data in a radio connection **(see rejection for claim 1 above)**, the game data being independent from the captured speech **(see rejection for claim 1 above)**; and

a processing unit (**i.e., control circuit 31**) coupled to the radio transceiver (**see Figure 3**), configured to transfer the captured speech and the game data between a mobile terminal and another mobile terminal through the radio connection (**see rejection for claim 1 above**). Peng fails to disclose a dual transfer mode (DTM) radio connection.

Heden discloses a dual transfer mode (DTM) radio connection (**i.e., the mobile station has the capability to support DTM; see paragraph [0030]**).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng with the teachings of Heden to arrive at the claimed invention for allowing simultaneous transfer of circuit switched voice and packet switched data over the same radio channel.

Regarding Claim 35, it is interpreted and rejected for similar reasons as set forth in claim 30. In addition, Heden discloses utilizing a general packet radio service transparent transport protocol (GTP). (**see rejection for claim 6 above**)

Regarding Claims 39 and 41, it is interpreted and rejected for similar reasons as set forth in claims 30 and 35. In addition, Heden discloses utilizing a DTM radio connection. (**see rejection for claims 10 and 12 above**)

Regarding Claims 40 and 42, it is interpreted and rejected for similar reasons as set forth in claims 39 and 41. In addition, Heden discloses wherein the signaling resource comprises a packet flow context (PFC) defined for the signaling and wherein the specific resource comprises a packet flow context (PFC) defined by one or more specific quality of service attributes. (**see rejection for claims 11 and 13 above**)

Regarding Claim 43, it is interpreted and rejected for similar reasons as set forth in claim 41. In addition, Heden discloses wherein the specific resource comprises a temporary block flow (TBF) defined by one or more specific quality of service attributes. **(see rejection for claim 14 above)**

10. Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peng and Heden in view of Marejka.

Regarding Claim 36, Peng and Heden disclose the network element wherein the processing unit is further configured to transfer the game data utilizing the GTTP as described above **(see rejection for claim 7)**. Peng and Heden do not disclose further configured to check one or more delay requirements of the game data, and to transfer the game data, if the delay requirements meet a predetermined delay limit.

Marejka discloses further configured to check one or more delay requirements of the game data, and to transfer the game data, if the delay requirements meet a predetermined delay limit. **(see rejection for claim 7)**.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng and Heden with the teachings of Marejka to arrive at the claimed invention for preventing loss or slowing of data transmissions.

Regarding Claim 37, Peng and Heden disclose the network element wherein the processing unit is further configured to transfer the game data utilizing the GTTP as described above **(see rejection for claim 8)**. Peng and Heden do not disclose further

Art Unit: 2617

configured to check a volume of the game data, and to transfer the game data, if the volume meets a predetermined volume limit.

Marejka discloses further configured to check the volume of the data, and to transfer the data, if a volume meets a predetermined volume limit **(see rejection for claim 8)**.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng and Heden with the teachings of Marejka to arrive at the claimed invention for preventing congestion in data communication networks.

Regarding Claim 38, Peng and Heden disclose the network element wherein the processing unit is further configured to transfer the game data utilizing the GTTP as described above **(see rejection for claim 9)**. Peng and Heden do not disclose further configured to check a block size of the game data, and to transfer the game data, if the block size meets a predetermined block size limit.

Marejka discloses further configured to check a block size of the data, and to transfer the data, if the block size meets a predetermined block size limit **(see rejection for claim 9)**.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Peng and Heden with the teachings of Marejka to arrive at the claimed invention for preventing congestion in data communication networks.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHANTELL HEIBER whose telephone number is (571)272-0886. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edouard Patrick can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. H./
Examiner, Art Unit 2617
September 10, 2010

/Patrick N. Edouard/
Supervisory Patent Examiner, Art Unit 2617